

OHIO AGRICULTURAL EXPERIMENT STATION
Lane Avenue Farm, Columbus, Ohio

Department of Horticulture Mimeograph Series No. 174
January 29, 1959

SWEET CORN VARIETY TRIALS - 1958
Columbus, Ohio

WALTER N. BROWN¹

MAR 30 1959
LIBRARY

The 1958 trials consisted of two plantings: the first included twenty-eight varieties in the early, mid-early, and early-midseason maturity range, planted on May 14; the second planting made on June 20, included 56 varieties in the early-midseason, midseason and late maturity ranges with suitable standards for maturity comparisons. Each of the varieties were evaluated in single row plots replicated five times. Each plot consisted of twenty-one hills spaced eighteen inches in the row with thirty-six inches between rows. Four kernels per hill were planted by hand jabber. Stand counts were made at the two-three leaf stage to determine germination and later the seedlings were thinned to two plants per hill permitting a maximum stand of 12,360 plants per acre. Fertilizer was drilled and disced in prior to planting at the rate of 1000 lbs./A of 10-10-10. Two sidedressings of 100 lbs./A of ammonium nitrate were applied to the first planting and one sidedressing to the second planting. Plants were not sprayed for control of flea beetle, corn borer, or corn earworm.

For the yield records only marketable size ears were included, however, some ears damaged by earworm were included, since it was assumed that insects could have been controlled by the use of suitable treatments.

The tymbols and rating system used are as follows:

Average Depth of Kernel: Average length of 3 kernels from center section of 3 ears selected at random from each plot.
Color of Kernel: LY= light yellow, MY= medium yellow, DY=dark yellow; B= bright, I= intermediate, D= dull.
Ease of Snapping: 1 - very difficult to 5 - easily snapped.
Shanks: 1 - long, over 6 inches to 5 - short 1 inch or less.
Flag Number: 1 - none to 5 - over eight.
Flag Length: 1 - less than 2 inches to 5 - over eight inches.
Tip Cover: 1 - exposed to 5 - long, extending 3 inches or more.
Silk Color: 1 - dark brown to 5 - clear or white.
Husk Color: 1 - light green and dull to 5 - dark glossy green.
Husk Tightness: 1 - loose to 5 - tight.
General Uniformity: 1 - poor to 5 - excellent.

SOURCE OF SEED

<u>Symbol</u>	<u>Source</u>
A2	Associated Seed Growers, New Haven, Conn.
B1	W. Atlee Burpee & Co., Philadelphia 32, Pa.
F1	Ferry-Morse Seed Co., PO Box 778, Detroit 31, Mich.
H1	Joseph Harris Co., Rochester 11, N.Y.
H2	Holmes Seed Co, Canton 2, Ohio.
M1	Michael-Leonard Co., 333-355 W. 35th St., Chicago 16, Ill.
M2	The J. Chas. McCullough Seed Co., PO Box 146, Cincinnati, Ohio
N1	Northrup King & Co., Minneapolis 13, Minn.
R1	Robson Quality Seeds, Inc., Hall, New York
R2	Rogers Brothers Seed Co., PO Box 30, Idaho Falls, Idaho
W1	F.H. Woodruff & Sons (Now incorporated with Associated Seed Growers)

GENERAL COMMENTS

The results of the first planting are presented in Table 1, and those of the second planting in Table 2. The weather during the month of June and July was excessively wet and cooler than normal, resulting in delayed maturities and slightly reduced yields. The departures from normal are given below:

	Temperature	Precipitation
May	-0.6	+0.42
June	-3.5	+5.42
July	0.0	+5.61
Aug.	+0.2	-0.40
Sept.	-0.4	+0.10

¹Department of Horticulture, Ohio Agricultural Experiment Station, Columbus 10, Ohio.

SWEET CORN VARIETY TRIALS- COLUMBUS, OHIO 1958

VC- 58

Row Number	Variety and Lot Number		Source	Days to First Harvest	Marketable Yield/Acre		Average Weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percent of Ears Having Given Number of Rows of Kernels								Average Depth of Kernel	Color of Kernel	Ear Snut	Ear Worm	East of Snapping(1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity(1-5)
					Dozens of Ears	Weight (Tons)				8	10	12	14	16	18	20	22													
				Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	Mm		%	%						%					
2	North Star	1795F	H1	72	1391	4.3	.52	6.9	1.6	-	5	85	10	-	-	-	7.3	-	-	24.3	4	4	3	2	3	4	3	2	3	
1	Sun Up	1750T	H1	72	991	2.9	.48	6.5	1.5	30	5	60	5	-	-	-	7.3	DYP	-	27.9	4	4	2	3	3	2	3	2	2	
3	Gold Crest	26911	F1	72	1199	3.5	.49	6.8	1.6	5	15	60	20	-	-	-	8.0	MYI	-	35.3	3	4	2	2	3	4	3	3	3	
7	Marcross	46033F	W1	76	1106	3.9	.58	7.3	1.6	15	20	65	-	-	-	-	8.0	MYI	1.4	38.2	3	4	3	3	3	4	3	3	2	
5	Golden Beauty	1791T	H1	76	1434	4.5	.52	7.2	1.6	-	5	80	15	-	-	-	8.0	MYB	-	29.5	3	4	3	2	4	4	3	3	3	
8	Morning Sun	309	H2	76	1206	4.1	.56	7.4	1.6	5	-	50	35	10	-	-	8.0	MYI	-	26.1	4	4	3	3	3	2	3	2	4	
4	Hybrid 101	86054	F1	76	1305	3.8	.48	7.4	1.5	-	5	65	20	10	-	-	7.7	MYB	-	17.0	3	4	2	3	4	3	3	3	4	
13	Early Hybrid 0144	44991F	W1	77	1490	5.1	.57	7.9	1.6	-	-	60	20	15	15	-	7.0	MYB	-	25.3	2	4	3	3	3	4	3	3	2	
10	Golden Earlipak	ST.68208	R2	77	1288	4.8	.62	8.2	1.5	5	15	80	-	-	-	-	7.7	MYB	-	36.3	3	4	3	3	3	4	3	3	2	
12	Garden Gold	23475	F1	77	1490	4.8	.53	7.6	1.5	-	-	60	40	-	-	-	7.3	MYB	-	19.1	2	4	2	2	4	3	3	3	2	
6	Seneca Beauty	1156	R1	77	1414	4.6	.54	7.2	1.6	-	-	65	25	10	-	-	8.0	MYI	-	22.8	3	4	3	2	4	4	3	3	3	
16	Carmelcross	53504-130	A2	77	1383	4.3	.52	7.4	1.7	-	10	25	35	30	-	-	7.0	MYB	0.6	22.2	3	4	3	3	3	4	3	2	3	
9	Northern Cross	1709T	H1	77	1253	4.3	.57	7.7	1.5	-	-	75	20	5	-	-	7.3	-	-	23.9	3	4	3	4	3	4	3	2	3	
18	Treasure Gold	23451	F1	78	1630	5.7	.58	7.6	1.7	-	-	45	30	25	-	-	7.3	MYB	0.5	15.1	3	4	3	3	4	4	3	3	2	
15	Carmelcross	1790F	H1	78	1404	5.7	.68	7.9	1.7	-	-	50	35	15	-	-	8.3	MYI	-	28.4	3	4	3	3	4	3	3	3	4	
19	Barbecue	1787T	H1	78	1521	4.9	.53	8.1	1.6	-	-	80	20	-	-	-	7.3	LYB	0.5	12.6	3	4	3	3	3	3	3	3	4	
11	Golden Emblem	23459	F1	78	1444	4.7	.54	7.7	1.6	-	-	65	30	5	-	-	8.3	MYI	-	24.5	3	4	3	2	3	3	2	2	3	
20	Asgrow Golden 22	53490-14	A2	79	1466	5.9	.67	7.6	1.6	-	-	45	15	40	-	-	8.7	MYI	-	9.4	3	4	3	3	3	4	3	3	5	
25	Mellowgold	ST.58133	R2	79	1398	5.3	.63	8.4	1.7	-	-	15	70	15	-	-	7.7	DYB	-	17.6	3	3	3	3	2	3	3	3	4	
17	Hybrid 103	82823	F1	79	1229	5.2	.70	7.7	1.6	-	-	50	25	25	-	-	9.3	LYD	-	16.3	4	4	4	4	3	4	3	2	3	
14	Golden Hybrid G-101	ST.68211	R2	79	1437	4.9	.56	7.5	1.6	-	-	75	25	-	-	-	8.7	DYI	-	9.6	4	4	3	2	4	4	3	3	4	
22	F-M Cross	21550	F1	82	1368	5.5	.67	8.2	1.6	-	-	15	25	60	-	-	7.3	MYB	-	5.6	3	4	3	3	3	4	2	3	4	
21	Sugar King	308	H2	82	1360	5.2	.63	8.1	1.6	-	-	-	10	80	10	-	9.3	LYD	0.6	13.0	3	3	4	4	3	3	2	3	3	
24	Evertender C	32661	M1	84	1657	5.8	.59	8.2	1.5	-	-	-	55	45	-	-	6.3	LYI	1.9	3.3	3	4	4	3	3	3	3	3	3	
23	Asgrow Golden 25	74530-130	A2	84	1467	5.6	.63	9.0	1.6	-	-	10	50	40	-	-	8.3	MYB	-	7.4	5	4	3	4	2	2	3	2	4	
27	Sugarcross	20716	M1	84	1667	5.5	.55	8.1	1.6	-	-	25	60	15	-	-	9.3	MYD	0.5	1.8	3	4	3	4	3	4	3	3	2	
26	Deligold	30661	M1	84	1376	5.2	.62	8.0	1.6	-	5	35	50	10	-	-	8.7	MYB	2.2	3.9	3	4	4	4	3	4	3	3	3	
28	Hoosier Gold	1728F	H1	84	1391	5.1	.61	9.3	1.7	-	-	60	30	10	-	-	8.7	MYB	0.6	9.4	3	4	3	4	3	4	2	3	4	
	LSL @ 5% Level				189	.8																								

TABLE 2

SWEET CORN VARIETY TRIALS Columbus, Ohio, 1958

Second Planting

Row Number	Variety and Lot Number		Source	Days to First Harvest	Marketable Yield/Acre		Average Weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percentage of Ears Having Given Number of Rows of Kernels							Average Depth of Kernel	Color of Kernel	Ear Snut	Ear Worm	Ease of Snapping (1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity(1-5)
					Dozens of Ears	Weight (Tons)				Percentage of Ears Having Given Number of Rows of Kernels																			
										8	10	12	14	16	18	20													
					Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	Mm.		%	%						%			
29	North Star	1795F	H1	65	1281	4.2	.54	6.8	1.7	25	30	45	-	-	-	-	7.7	LYI	-	19.3	3	4	3	3	4	4	3	3	1
30	Golden Beauty	1791T	H1	65	1353	4.2	.51	7.1	1.6	-	5	80	15	-	-	-	8.3	LYI	-	29.0	4	4	2	2	4	4	3	4	4
32	Morning Sun	309	H2	65	1252	3.9	.52	7.1	1.6	-	-	60	40	-	-	-	9.0	LYI	-	39.3	3	4	3	4	3	7	3	3	4
38	Early Hybrid 0144	44991F	W1	65	1498	5.4	.60	7.7	1.6	-	-	45	55	-	-	-	6.7	MYI	-	27.7	3	4	3	3	3	4	3	3	4
31	Hybrid 101	86054	F1	65	1527	4.0	.44	7.6	1.5	-	5	95	-	-	-	-	7.0	LYI	-	21.6	3	4	3	3	4	3	3	3	4
34	Golden Earlipak	ST. 68208	R2	65	1172	4.1	.58	8.2	1.6	10	25	65	-	-	-	-	7.7	LYI	-	45.1	4	4	3	3	3	4	3	3	3
33	Northern Cross	1709T	H1	64	1483	5.0	.57	7.7	1.6	-	5	80	15	-	-	-	8.7	LYI	0.5	9.3	3	4	3	3	3	4	3	3	3
41	Carmelcross	53504-130	A2	65	1352	4.2	.52	7.5	1.5	-	-	80	20	-	-	-	7.0	LYI	0.6	22.7	4	4	3	3	3	3	3	4	2
36	Garden Gold	23475	F1	65	1145	3.8	.55	7.6	1.5	-	5	85	10	-	-	-	8.0	LYB	-	12.1	3	4	3	2	3	4	3	3	3
37	XP-1069	M5595	A2	65	1280	3.6	.47	6.7	1.5	-	5	75	20	-	-	-	8.7	LYI	1.2	18.1	3	4	3	4	4	4	3	3	3
35	Golden Emblem	23459	F1	65	1039	3.4	.55	7.6	1.5	-	5	80	15	-	-	-	8.7	MYI	-	13.3	3	4	3	2	3	3	3	3	3
43	Hybrid 103	82823	F1	67	1578	6.2	.65	7.6	1.7	-	-	20	25	55	-	-	7.3	LYI	0.5	8.3	3	4	4	3	3	4	4	2	2
57	Hybrid 817	87889	F1	67	1642	6.2	.62	8.0	1.6	-	5	65	25	5	-	-	7.0	LYI	-	18.3	4	4	3	3	4	3	3	3	4
51	Treasure Gold	23451	F1	67	1507	5.5	.61	7.6	1.6	-	-	65	25	10	-	-	7.0	LYI	-	12.8	3	4	3	3	4	4	3	3	2
40	Carmelcross	1790F	H1	67	1282	4.7	.61	7.5	1.6	-	-	80	20	-	-	-	7.3	MYI	-	22.2	4	4	3	3	4	4	2	4	3
56	Foremost Y-2	23486	F1	70	1441	5.6	.65	8.2	1.6	-	-	15	55	25	5	-	9.0	MYB	-	27.1	3	4	3	3	3	4	2	3	3
45	Asgrow Golden 22	53490-14	A2	70	1335	5.5	.68	8.0	1.8	5	-	65	15	15	-	-	8.7	LYI	-	43.1	4	4	3	3	3	4	3	3	3
46	Mellogold	ST. 58133	R2	70	1283	5.0	.64	8.3	1.7	-	-	10	65	25	-	-	8.7	MYB	-	38.9	4	4	3	3	2	3	2	3	3
39	Golden Hybrid G-101	ST. 68211	R2	70	1318	4.5	.57	7.5	1.6	5	5	8	10	-	-	-	7.7	LYI	-	19.9	4	4	3	3	4	4	3	3	2
44	F-M Cross	21550	F1	71	1421	5.8	.68	6.7	1.6	-	-	10	15	75	-	-	7.7	LYI	-	30.8	4	4	3	3	3	4	3	3	3
42	Sugar King	308	H2	71	1451	5.1	.58	7.6	1.6	-	-	10	25	65	-	-	7.3	-	0.5	50.3	3	3	3	3	2	3	3	3	2
83	Seneca Supermarket	1506	R1	72	1424	6.1	.71	8.7	1.5	-	5	50	40	5	-	-	6.7	LYI	-	37.8	3	4	3	3	3	3	3	4	4
48	Evertender C	32661	M1	72	1425	5.3	.62	8.1	1.6	-	-	-	20	60	20	-	7.7	LYI	1.1	12.4	3	4	3	4	3	4	3	3	3
53	Wonderful	17890F	H1	72	1421	4.5	.53	8.4	1.5	-	5	45	45	5	-	-	8.0	LYD	-	34.6	4	4	3	3	3	4	3	3	3
47	Asgrow Golden 25	75430-13	A2	72	1311	4.4	.56	8.7	1.6	-	-	30	55	15	-	-	8.3	LYB	-	39.8	3	4	3	3	3	3	2	3	3
50	Sugarcross	20716	M1	72	1187	3.9	.55	7.9	1.5	-	-	25	65	10	-	-	7.0	MYI	0.6	21.9	3	4	3	3	3	4	3	3	1
49	Deligold	30661	M1	72	1106	3.7	.55	7.6	1.5	-	-	15	50	35	-	-	8.0	DYI	-	25.0	4	4	3	3	3	3	3	3	3

LSD @ 5% Level

352 1.6

